# Recombinant MORC1 protein (His tag)

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| **Catalog Number** | 547635 |
| **Synonyms** | Cancer/testis antigen 33; CT33 |
| **Species** | Human |
| **Expression System** | E. coli |
| **Accession** | Q86VD1 |
| **Molecular Weight** | Predictes a molecular mass of 52.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band. |

## Product Information

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| **Sequence Region** | 1-445 |
| **Form** | Lyophilized powder |
| **Formulation** | Lyophilized from sterile PBS, pH 7.4 |
| **Purity** | >89%, by SDS-PAGE with Coomassie Brilliant Blue staining. |
| **Endotoxin** | Not tested. |
| **Activity** | Not tested. |
| **Stability** | Samples are stable for up to twelve months from date of receipt at -70℃ |
| **Protein Construction** | DNA encoding 1-445 aa (Q86VD1) were fused with 6His tag. |

## Storage & Handling

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| **Reconstitution** | Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. |
| **Storage** | Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. |
| **Shipping** | In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature.<br>Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise. |

## Description

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| **Description** | Recombinant MORC1 protein fragment (residues 1-445), derived from the human MORC family CW-type zinc finger protein 1 (CT33), designed for robust structural and biochemical studies. This stable, soluble fragment supports research into DNA methylation and spermatogenesis mechanisms.<br>MORC1 is essential for spermatogenesis and plays a critical role in de novo DNA methylation and silencing of transposable elements in male embryonic germ cells, as evidenced by conserved functions across species. The protein localizes to the nucleus, where it contributes to epigenetic regulation and germ cell development, highlighting its importance in reproductive biology and gene expression control. |